

## FOR BOARD ACTION

Agenda Item # 7.a.

Meeting Date:

11/25/08

**SUBJECT:** Emission Reduction Project  
Mechanical Construction I Contract – Change Order 001

**PREPARED BY:** Wally Schlink  
Director of Power Resources

### ITEM DESCRIPTION:

The RPU Board approved the contract identified as Mechanical Construction I with Moorhead Machinery & Boiler Company for the installation of the major new equipment related to the SLP Emission Reduction Project. The firm lump sum price of the contract was \$7,408,702. The contract was written as a series of 18 different activities or items, each one with a specific scope and price, which when totaled make up the scope and lump sum value of the contract.

This work is at about 95% complete and staff is in the process of bringing the various Request For Information (RFI) and Engineering Change Orders (ECO) to completion which add up to approximately \$639,650.

Staff would like the authorization to shift funds from one activity or item to another within the contract which would be a change in scope but without any increase in the contract value. Specifically staff would propose shifting \$172,926 from Item 013 Start Up to Item 016 Contingency to cover the various work that has been identified through the RFI and ECO process.

Attached is a recommendation from the project engineers as well as a matrix identifying the various changes and costs.

### FOR CAPITAL PURCHASES/BIDS/MAJOR PROJECTS:

Request is for a contract change of scope but there are no additional funds being requested.

### UTILITY BOARD ACTION REQUESTED:

Staff requests Board approval of Change Order 001 to the Mechanical Construction I contract which is a change of scope shifting funds totaling \$172,926 from Item 013 in the contract to Item 016. The value of the contract will remain at the previously approved amount of \$7,408,702.

  
General Manager

  
Date

**ROCHESTER PUBLIC UTILITIES**

November 14, 2008

Mr. Walter Schlink  
 Director of Power Production  
 Rochester Public Utilities  
 4000 East River Road NE  
 Rochester, MN 55906-2813

Subject: Change Request Mechanical I Contract  
 Silver Lake Plant Unit 4, Emissions Reduction Project

Dear Mr. Schlink:

This letter is to request a change to the Mechanical I Contract. As shown on Exhibit A, the total contract amount is \$7,408,702. Also on Exhibit A, the Contract is broken down into 18 various numbered categories, which add up to the total mentioned above.

We request approval to shift funds as needed between two (2) of the categories:

Item#	Description	Current Amount	New Amount
013	Start-up and Testing Support	\$182,926	\$10,000
016	Contingency Amount	\$535,000	\$707,926
	Total Above	\$717,926	\$717,926

The reason for this request is as follows:

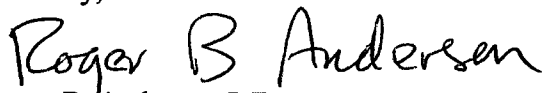
The project has tracked Requests for Information and Engineering Change Notices in an organized fashion throughout the work, and has a detailed listing of the related costs as shown in the attached cost matrix.

Our best estimates of these changes, which go to the contingency line item currently add up to \$639,650. Details of the estimated amount is attached. This construction work is about 95% complete as of mid-November and we do not anticipate significant added costs beyond what is shown. The request does not increase the contract cost but only a change in scope of work.

At the same time, we anticipate very little costs going to the start-up and testing line item. Very little support has been required from the Mechanical Contractors during loop checks and turnover.

We recommend allowing the project to shift funds as noted above.

Sincerely,

  
 Roger B. Anderson, P.E.  
 Project Manager

Attachment RBA/bls

## Mechanical I Contract

RF/ECN No.	Description	Submitted Costs
RFI 20.04-001	Missing PJFF Beam	\$ 775.50
RFI 20.04-002	Booster Fan Concrete Inertia Base	\$ -
RFI 20.04-003	PJFF Compartment Wall Insulation	\$ -
RFI 20.04-004	Inlet / Outlet Manifold Installation	\$ -
RFI 20.04-005	Damaged PJFF Module #2	\$ 8,700.00
RFI 20.04-006	PJFF Inlet Damper Connection, Weather Enclosure Plate & Anchor Bolts	\$ 10,147.09
RFI 20.04-007	Electrical Transformer Unloading	\$ 1,151.85
RFI 20.04-008	Repair Baghouse Inlet Ducts to make airtight	\$ 8,684.50
RFI 20.04-009	Outlet Nozzle/Manifold Installation Interference	
RFI 20.04-010	Pump House / Lime Slurry Suction Pipe	\$ 1,649.55
RFI 20.04-011	Supply and Return Lines to SDA Penthouse	\$ 6,259.05
RFI 20.04-012	Lime Slurry Return Lines from tank to pump house-pinch valves	\$ -
RFI 20.04-013	Insulation at Weather Enclosure and PJFF Hopper Doors	\$ -
RFI 20.04-014A	Seal weld (10) outlet ducts on the bag house outlet manifold	\$ 5,058.76
RFI 20.04-014B	Add weld at the SDA / Support Ring to hopper transition	\$ 1,761.75
RFI 20.04-015	PJFF Weather Enclosure Roof Cables-relocate	\$ -
RFI 20.04-016	Lime Slurry Piping and Fittings-Confirm Materials	\$ -
RFI 20.04-017	PJFF Stair Tower Anchor Bolt Discrepancy-Modify base	\$ 3,395.98
RFI 20.04-018	PJFF Instrumentation Connection-Supply (10) 1" plugs and seal weld	\$ 939.36
RFI 20.04-019	Instrument Air Supply Change	\$ -
RFI 20.04-020	Air Supply Pipe Flex Hose (Mark No. 3-20) -Supply (170) Pieces	\$ 2,045.64
RFI 20.04-021	Hopper Discharge Connection-weld backside of (10) flanges	\$ 3,163.33
RFI 20.04-022	Wet Insulation	\$ -
RFI 20.04-023	Precip Column Anchor Bolt Projection	\$ -
RFI 20.04-024	Hopper Heater junction Box Support Channel & Thermocouple Stud	\$ 782.82
RFI 20.04-025	SDA Hopper Outlet Duct Support Discrepancy	\$ 5,215.30
RFI 20.04-026	Access Steel at Lime Silo Pumphouse Anchor Bolt Discrepancy	\$ 1,291.42
RFI 20.04-027	Emergency Eye Wash / Showers	\$ 73,484.30
RFI 20.04-028	Condensate Transfer Piping	\$ 9,261.00
RFI 20.04-029	Ash Hopper Level Indicators	\$ 2,007.75
RFI 20.04-030	NCC Couplings for Ash Piping	\$ 6,507.18
RFI 20.04-031	Ash Piping Specs from NCC on Wall Thickness	\$ -
RFI 20.04-032	Cable Tray Connections at Column 18	\$ 4,555.48
RFI 20.04-033	Lead Paint Removal	\$ 1,559.36
RFI 20.04-034	1/4" Air Supply Lines to Ash Intake and Swing Gates	\$ -
RFI 20.04-035	Pulse Jet Air Piping- Supply lines to Reservoirs & Poppet Dampers	\$ -
RFI 20.04-036	1/4" NPT Openings on the Pulse Jet Air (PJA) Regulators	\$ -
RFI 20.04-037	Ash Silo Swing Gate Interference	\$ 1,278.90
RFI 20.04-038	Ash Pipe Support "D"	\$ 1,972.95
RFI 20.04-039	Roll Up Doors	\$ 36,739.80
RFI 20.04-040	PDC Access platform concrete	\$ 2,034.90
RFI 20.04-041	Piping and Valves around CBEEC Air Compressor	\$ 1,005.82
RFI 20.04-042	Opening in 8" Spring Actuated Air Intake Valve	\$ 1,514.10
RFI 20.04-043	Air Vent for Condensate Tank	\$ 988.38
RFI 20.04-044	Ash Silo Monorail Weather Enclosure Interference	\$ 297.48
RFI 20.04-045	Bridge Crane Cable Reel Support	\$ 1,801.14
RFI 20.04-046	Condensate Tank Interior Paint Repair	\$ 453.60
RFI 20.04-047	Baghouse Stainless Steel Side Plates	\$ -
RFI 20.04-048	Booster Fan and SDA Enclosure Interference	\$ 7,940.60
RFI 20.04-049	Slaker Level Drain Discrepancy	\$ 4,670.40
RFI 20.04-050	Aeration Piping	\$ -
RFI 20.04-051	Ash Silo Aeration Piping Clarification	\$ -
RFI 20.04-052	PJFF Module Roof Penetration	\$ -
RFI 20.04-053	Access Landing Platform @ EL. 1023'-3"	\$ 5,218.85
RFI 20.04-054	Electrical Panel Support Structure	\$ 3,122.99
RFI 20.04-055	Ash Fitting Interference with Penthouse Sleeve Opening	\$ -
RFI 20.04-056	Ash Pipe Intake Vent for SDA	\$ 1,274.70
RFI 20.04-057	Painting of Ash Silo Pipe	\$ -
RFI 20.04-058	Ash Exhauster Discharge Pipe Penetration Discrepancy	\$ 1,358.70

RFI 20.04-059	Aeration Piping Inteferece with Blower Piping and Knife Gate Valve	\$ 1,286.25
RFI 20.04-060	Ladder Landing on N. Side of PJFF	\$ 1,071.92
RFI 20.04-061	Lime Silo Slice Gap/Leak	\$ 3,552.05
RFI 20.04-062	Fall Protection at Lime Silo Dust Filter Platform/Ladder	\$ -
RFI 20.04-063	Unloader Level Floor Grating	\$ 898.36
RFI 20.04-064	Outlet Duct Elevation Discrepancy	\$ 6,042.90
RFI 20.04-065	Additional Ash Silo Supports and Penetrations	\$ 13,654.36
RFI 20.04-066	Condensate Tank Pressure Gauge and Thermocouple Openings	\$ 647.64
RFI 20.04-067	Ash Silo Exhauster to Pulse Filter Piping Tie In to Pulse Filter Discrepancy	\$ -
RFI 20.04-068	Ash Silo Unloading Level Equipment Anchoring	\$ 403.20
RFI 20.04-069	Ash Silo Pulse Jet Silo Vent Filter Exhaust Piping	\$ -
RFI 20.04-070	Door No. 10 Interference	\$ 225.50
RFI 20.04-071	Cable Bus Tray Support	\$ 3,572.69
RFI 20.04-072	SDA Weather Enclosure Platform Girt Framing	\$ 21,032.28
RFI 20.04-073	4" Vacuum Equalizing Piping & Reciever Support	\$ 2,580.90
RFI 20.04-074	Lime Silo/Pump House Flashing	\$ 2,490.25
RFI 20.04-075	Friday Work Hours	\$ 17,151.75
RFI 20.04-076	Pipe Sleeves in Ash Silo for Air and Water	\$ 1,392.70
RFI 20.04-077	Booster Fan Bearing Cooling Hoses	\$ -
RFI 20.04-078	SDA Piping	\$ -
RFI 20.04-079	Tempered Water for Eye Wash	\$ -
RFI 20.04-080	Additional Lagging Supports and Girt Modifications	\$ 18,127.78
RFI 20.04-081	SDA Inlet Duct Support Modification	\$ 828.70
RFI 20.04-082	Ash Silo Sounding Enclosure	\$ 8,617.94
RFI 20.04-083	Instrument Air	\$ 2,353.05
RFI 20.04-084	Valve Tags	\$ -
RFI 20.04-085	Fabric Filter Vent Fan and SDA Louver Framing	\$ 2,906.00
RFI 20.04-086	Potable Water Tie-in	\$ 11,557.35
RFI 20.04-087	PDC West Access & Cable Tray Support	\$ 12,642.69
RFI 20.04-088	Tempered Water Loop for Eyewash/showers	\$ 802.79
RFI 20.04-089	Pinch Valve for Lime Slurry Return	\$ 925.25
RFI 20.04-090	Lime Slurry Pipe Leaks	\$ 10,000.00
RFI 20.04-091	Lime Silo Platform Lagging Discrepancy	\$ 25,160.02
RFI 20.04-092	Ash Silo Hoist Extension Cost Estimate	\$ -
RFI 20.04-093	Pulse Jet Air Pipes	\$ 11,419.80
RFI 20.04-094	SDA Pressure Differential Ports	\$ 909.29
RFI 20.04-095	SDA Platform Insulation Cost Estimate	\$ 4,430.00
RFI 20.04-096	Opacity Monitor Flange	\$ 993.30
RFI 20.04-097	SDA Inlet Duct Support Interference	\$ 4,815.11
RFI 20.04-098	Lime Pump House Insulation	\$ 4,200.00
RFI 20.04-099	Lime Dilution Water Valve	\$ 939.75
RFI 20.04-100	Firewate Pipe Supports at CLR Devices	\$ 653.10
RFI 20.04-101	Inlet Duct Port/Tap Interferences	\$ 3,800.00
RFI 20.04-102	Chimney Adaptor Detail Discrepancy	\$ -
RFI 20.04-103	Painting Adjustment Prices	\$ (13,394.00)
RFI 20.04-104	Booster Fan Enclosure and SDA Walkway Heating and Ventilation	\$ 7,500.00
RFI 20.04-105	Misc. Mechanical Changes	\$ 5,000.00
RFI 20.04-106	Lime Grit Screw Reorientation/Modifications	\$ 19,000.00
RFI 20.04-107	Heat Traced Piping Extra Work	\$ 14,355.00
RFI 20.04-108	SDA Man-Door Addition	\$ 2,500.00
RFI 20.04-109	Booster Fan Enclosure Interference w/ Outlet Duct Support	\$ 15,000.00
RFI 20.04-110	Reinstallation of the Platform over the Outlet Duct to the Chimney	\$ 7,500.00
ECN 1, 4, 5 & 7	Added/Revised Platforms	\$ 15,472.00
ECN 2	Cable Tray Support Steel Changes	\$ 152.00
ECN 3	Revised North Annex Structural Steel	\$ 38,280.00
ECN 6	Added SDA Turning Vane Field Assembly	\$ 17,461.49
ECN 8	Added SDA Weather Enclosure Field Assembly	\$ 35,488.35
ECN 9	Added Condensate Steam Blanketing Line	\$ 32,700.00
ECN 10	Added Air/Heater Duct Supports	\$ 8,500.00
<b>Total Contingency Requirements</b>		<b>\$ 639,649.79</b>
<b>Delta From Approved (\$535,000)</b>		<b>\$ (104,649.79)</b>



## RESOLUTION

BE IT RESOLVED by the Public Utility Board of the City of Rochester, Minnesota, to approve Change Order 001 to the Mechanical Construction I contract with Moorhead Machinery & Boiler Company for the Silver Lake Plant Unit 4 Emissions Reduction Project which is a change of scope shifting funds totaling \$172,926 from Item 013 in the contract to Item 016. The value of the contract will remain at the previously approved amount of \$7,408,702.

Passed by the Public Utility Board of the City of Rochester, Minnesota, this 25<sup>th</sup> day of November, 2008.

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President

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Secretary